

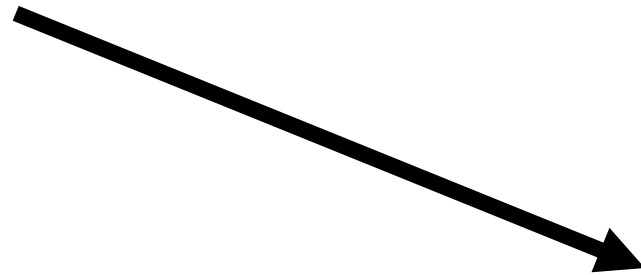
Innovation → Transformation

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We have a problem . . .

We don't export enough . . .

88% (2000)



Trade as a proportion of GDP

48% (2016)

Less than competitors . . .

- Viet Nam's goods exports increased **x 9.5**
- While Sri Lanka's goods exports increased **x 2.1**

Between 2000 and 2014

And not the right things . . .

- Export of labor yielded USD 7.2 billion in 2016
 - **70%** of earnings from goods exports)
 - **About the same** as service exports USD 7.1 billion
- Composition of goods exports has remained stale with over reliance on garments

Market access . . . still spoken of in future tense

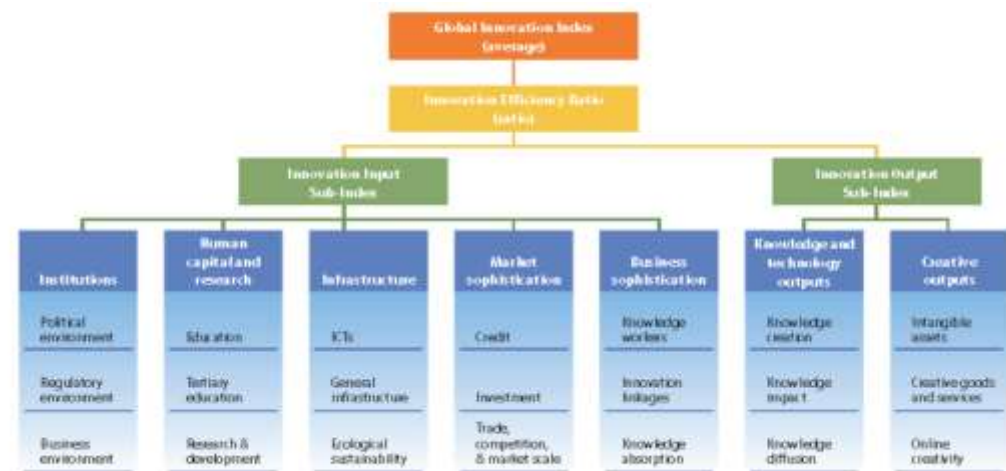
- Promises improved market access to 3 billion people not yet finalized, except for GSP Plus
- Ability to exploit opportunities compromised by
 - Lagging FDI
 - Labor shortages

Key element of solution:
Innovation

Where are we now?

- Overall GII score = Simple average of input and output scores
- Input sub-index comprises 5 pillars, including institutions, human capital & research
- Output sub-index has two pillars: knowledge & tech outputs & creative outputs
- Innovation efficiency ratio shows how much output country gets for inputs
- 81 indicators in all

Global Innovation Index 2017, from Cornell U;
INSEAD and WIPO



Top 10 Lower-middle-income countries, according to Global Innovation Index 2017

	By Global Innovation Index Rank within Income Group (Out of 29)	By Innovation Input Sub-index Rank	By Innovation Output Sub-index Rank	By Innovation Efficiency Ratio
1	Viet Nam (47)	India (66)	Viet Nam (38)	Viet Nam (10)
2	Ukraine (50)	Mongolia (67)	Ukraine (40)	Ukraine (11)
3	Mongolia (52)	Viet Nam (71)	Moldova (42)	Armenia (17)
4	Moldova (54)	Moldova (73)	Armenia (47)	Moldova (22)
5	Armenia (59)	Ukraine (77)	Mongolia (48)	Mongolia (27)
6	India (60)	Morocco (79)	India (58)	Cote d'Ivoire (40)
7	Morocco (72)	Tunisia (81)	Philippines (65)	Indonesia (42)
8	Philippines (73)	Armenia (82)	Morocco (68)	Kenya (50)
9	Tunisia (74)	Philippines (83)	Kenya (70)	India (53)
10	Kenya (80)	Kyrgyzstan (89)	Tunisia (71)	Philippines (55)

Sri Lanka (90) is not in Top 10 of lower-middle-income countries

- Viet Nam (47), a key competitor, is in the lead among all lower-middle-income countries and our Asian peers
 - Sri Lanka is 43 places behind
- India (60) is leader in South Asia
 - Sri Lanka is 30 places behind
- Sri Lanka was in 10th place for innovation efficiency in 2016; now nowhere

Solution

Experiment Nation

Regional leader in innovation, home to Sri Lankan and global firms in diverse industries who

- Research
- Design
- Incubate, and
- Test world-class products and services

in a highly competitive business environment

Innovation eco-system

Within which user acceptance of product and process innovations can be systematically assessed using modalities such as

- Sample surveys
- Data analytics
- Qualitative research and
- A/B testing

conveniently, quickly, and at low cost

Actions

Create leading test-bed in region for product and process innovation

- Incentivize private firms and non-profit entities to put in place the necessary elements
- Market the initiative to local and foreign firms
- Enable firms to move to Sri Lanka and bring in personnel
 - Greater flexibility in terms of cross-border movement of skilled personnel, including those from the diaspora required

Encourage angel and venture-capital finance; promote incubators and accelerators; provide incentives for large companies to create space for innovation

- Reexamine and modify under-utilized tax incentives that were put in place a few years ago to promote R&D
- Encourage domestic high net-worth individuals and firms to enter into angel and venture financing
- Encourage foreign entities with expertise to consider Sri Lanka
- Legislate to permit a company to have more than 50 shareholders to enable effective crowd-funding platforms similar to Kickstarter and Indiegogo
- Reactivate plans to make Trace Expert City a space for research and innovation
 - Similar facilities should be promoted/enabled in Jaffna, Matara, Kandy and Kurunegala

Create conditions for cross-fertilization of ideas + reward system for successful innovators (including, but not limited to, an effective intellectual property system)

- Most challenging task is creation of a reward system that does not stifle cross-fertilization of ideas and thereby innovation
 - Requires mobilization of the best brains in the world to critically assess status quo and experience and develop a cutting-edge reward system that includes prizes and similar rewards, in addition to conventional patents
- A “fast track” legal channel to handle contract disputes and matters related to the reward system is desirable

Foster mindsets conducive to innovation and larger-than-Sri Lanka thinking

- Enable closer university-industry collaboration in wherein multiple firms in the same industry would work with selected academic units
 - Internships and final-year projects designed to produce projects with commercial potential
 - Lessons from University of Moratuwa's experience in inculcating entrepreneurial attitudes should be extended across a range of tertiary educational institutes, not limited to universities
- Establish magnet/demonstration schools at the secondary level, sponsored by industry associations such as CCC and SLASSCOM that will demonstrate innovation-focused learning
- Embed innovation-friendly messages in local teledramas
- Encourage entrepreneurs to think bigger than Sri Lanka
 - Focusing on a mature set of entrepreneurs (say above 30 years in age)
 - Expand universe of angel and venture capital beyond Sri Lanka

Implementation

- Supra-ministerial task force supported by lean management team
 - Tasks are necessarily broader than established Ministerial and agency silos
 - In light of the turf-safeguarding attitudes of government Ministries and agencies, political commitment at the highest levels essential
- Not being anchored on subsidies, initiative will have to mobilize foreign and domestic innovation-relevant investments
- Necessarily requires a strong emphasis on communication
 - Will require “facts on the ground” including successful innovation incubators such as the reactivation of Trace Expert City and
 - Showcasing of start-ups and innovation units within established companies
 - Attention will have to be paid to targeted improvement of indicators that form the inputs of composite indices such as the Global Innovation Index